

**ABSTRACT**

An architecture for a hardware database management system is described. A data flow engine is connected to memory storing the information making up a database or 5 databases. The data flow engine is formed by a parser, an execution tree engine and a graph engine. The parser takes standardized database statements and converts those statements into a set of executable instructions and associated data objects. The executable instructions and data objects are then sent to the execution tree engine where an execution tree is created, the execution tree forming the order of execution for the 10 executable instructions. The graph engine receives those executable instructions from the execution tree engine that require access to the database in memory and manipulates the information in the database as required by the executable instructions for implementing the standardized database statement.